Application No.: 10/542,054

AMENDMENTS TO THE SPECIFICATION

Please replace the present title with the following amended title:

EDDY CURRENT DETECTION OF WHEEL SPEED WITH VOLTAGE

THRESHOLD SHIFTING DETECTION SYSTEM

Please amend Paragraph [0008] as follows:

The optical encoder 62 is disposed in an wheel axle 60 on one end of an arm 4 constituting a support leg device (to be described in detail later; refer to Fig. 1). By joining a coupling 65 in the side of the optical encoder 62 and a coupling 66 in the side of the wheel 2, the slit disk 62a is rotated along with the rotation of the support wheel (to be referred to simply as

wheel) 3.

Please amend Paragraph [0046] as follows:

Specifically, in this configuration, a shifting of alternate current detection signals by the detection signal shifter can be conducted, for example, so that threshold levels can be included within the amplitude range of alternate current detection signals. If alternate current detection signals are shifted so as to fall into the amplitude range of alternate current detection signals, alternate current detection signals after a shifting can be converted into pulse signals

according to threshold levels. Hence, wheel rotational speed can be detected accurately.

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